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A RUBBER STAMP METHOD FOR PRODUCING SPECIMEN LABELS

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THE METHOD DESCRIBED BELOW has proved a speedy and convenient means of producing insect labels, and appears equally adaptable for labels of larger size. Anyone capable of lettering neatly with a crow-quill pen should have little difficulty in mastering the technique. Some practice probably will be required before best results consistently are obtained. These directions are the result of much experimentation, and should be followed meticulously. Brand names of several materials are given because other brands have not proved so satisfactory; substitutions should be avoided.

In view of modern advances in techniques of reproduction, preparation of the mold by hand engraving may appear retrogressive. However, this method offers several advantages. No expensive equipment is required, and all the materials are easily obtainable. There is no necessity for setting up or distributing type, nor is there a press to clean. The equipment may be taken into the field. Most important, the method is extremely rapid. Maximum efficiency is attained for series of eight to fifty labels.

Ross scratchboard makes an ideal mold for insect labels. The thinness of the plaster surface limits the stamp to low relief; consequently letters must be made small and close together. For larger lettering, as is used in bird and mammal labels, where deeper engraving is required, thin tablets of plaster of paris are satisfactory. Wax is not suitable as a mold, since the shavings clog the impressions of the letters.

Lettering is cut with a dissecting needle, shortened to 8 mm and resharpened. The needle should be held vertically, and gentle, even pressure used. Letters with closed loops must be executed with particular care to prevent the centers of the loops from breaking out. Because of the low relief in stamps with fine lettering, blank spaces tend to print as smudges. If spaces cannot be avoided, lines should be ruled through them (fig. 1). Engraving these labels is so rapid that a separate mold easily may be made for each date, thus eliminating the necessity of annotating individual labels with pen.

Letters need not be cut deeply to print well. Avoid cutting through the plaster coating of the scratchboard to the paper beneath;

if this occurs, the rubber often pulls up flakes of plaster as it is separated from the mold. This sticking may be prevented by treating the scratchboard with silicone mold-release, or with polypropylene glycol (hydraulic brake fluid). Ordinarily such treatment is not necessary, unless the board has been coated with ink, but it greatly improves the working qualities of the scratchboard.

Make a frame by cutting in a piece of thin, waxed cardboard, a rectangular opening large enough to allow a space of at least 4 mm surrounding the engraved label, when the frame is placed over the label. This frame will depress the face of the stamp surrounding the label, so that only the portion included in the opening will print. Using the frame as a guide, incise a border no farther than 1 mm from the lettering, and slightly deeper (fig. 1). The space between this border and the cardboard frame is then filled with parallel engraved lines (fig. 2). This border area supports the face of the stamp, preventing smudging, and allowing more pressure to be used in printing, without wearing down the letters so rapidly. The wider it is, the better will be the quality of the labels. The printed border is trimmed away from the finished labels.

A stamp handle is made by cementing a rectangle of glass or metal, 10 x 30 mm, to the end of a large cork (fig. 5). Over this is placed a 20 x 70 mm strip of wire gauze, the ends of which are bent back and taped to the sides of the cork.

To make the stamp, a small pellet of Eberhard Faber kneaded rubber is laid over the mold (fig. 3). The cardboard frame is steadied with the left hand while the stamp handle is pressed down firmly into the rubber, and removed with a slight rocking motion. This should result in a thin layer of rubber on the face of the stamp handle, extending about 3 mm beyond the impression of the frame, and bearing a perfect impression of the mold (fig. 4). If too much rubber has been used, the edges should be pressed down to prevent their printing.

The stamp pad is a piece of one fourth inch foam neoprene, such as is used in skin diver's wet suits, covered with a tough piece of plastic film, taped in place. After each use, the plastic is stripped off and discarded. Rigid surfaces, such as with glass, are not suitable for ink plates, since they do not ink the stamp evenly, and their lack of resilience causes the stamp to wear down rapidly. Cloth stamp pads are too coarse for insect labels, and cannot be used with oil ink.

The ink is spread with a brayer made from a piece of coat-hanger wire, with a 40 mm length of tygon plastic or smooth rubber tubing for a roller. The tubing may be discarded after each use. If shaped as shown in figure 6, the brayer may be set down without the inked roller touching the surface.

Either ordinary printers ink or oil linoleum block-printing ink may be used. It should be spread out quite thin, and frequently rolled. If allowed to become tacky, the ink pulls rubber from the face of the stamp.

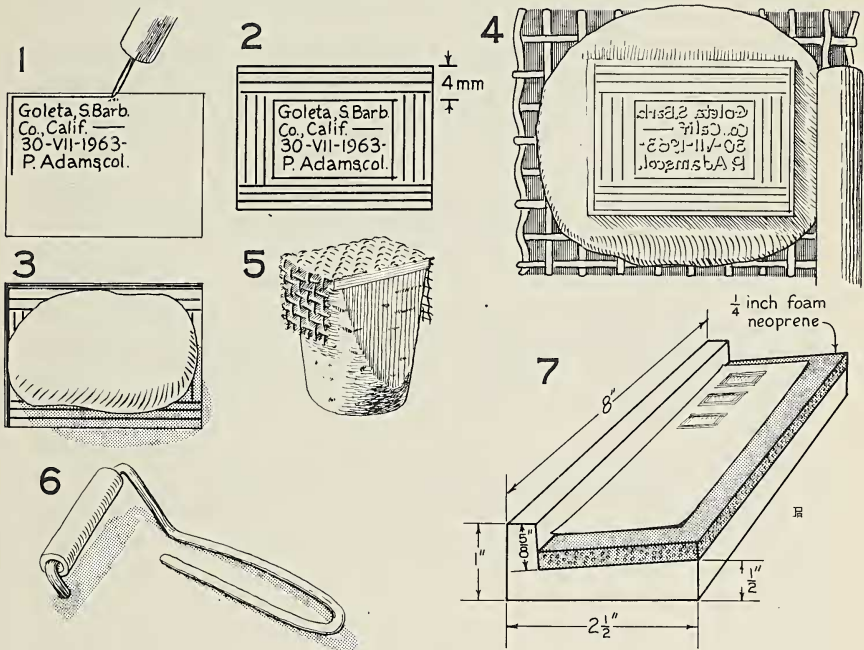


Fig. 1. Incising the inner border around the label, using a cardboard frame as a guide. Fig. 2. The completed label mold, engraved in scratchboard. Note wide engraved border. Fig. 3. Cardboard frame and kneaded rubber pellet in position over mold. Fig. 4. The stamp, formed for forcing the rubber into the mold with the stamp handle. Edges of rubber being pressed down to prevent smudging. Fig. 5. The stamp handle. Wire gauze is held in place with a few turns of tape. Fig. 6. Brayer. Fig. 7. Printing pad with guide for aligning labels.

When inking and printing, hold the cork gently between the thumb and third finger, with the index finger on the top of the cork. Touch the stamp to the inked surface, release the thumb and third finger, and press lightly with the index finger. Print with the same motion. Very little pressure is required; delicate handling produces clean impressions and prevents premature deterioration of the stamp. Two labels usually can be printed each time the stamp is inked.

Any medium weight paper may be used, so long as the surface is smooth. For very small lettering, a coated paper, such as is used to line insect boxes, is ideal. A sheet of foam neoprene under the paper results in better impressions and prolongs the life of the stamp. Straight rows of labels may be produced using a margin guide as shown in

figure 7. With this device printing is slightly more difficult, but cutting out the labels is greatly facilitated.

After about fifty impressions, a kneaded rubber stamp usually will require renewal. Remove the ink with scrap paper, peel off the rubber, reshape it, and take another impression from the mold. Discard the rubber when it absorbs so much ink as to lose its springiness, or becomes sticky.

Permanent stamps can be made with a variety of materials. Silicone rubber has been used with good success. The mold should be lubricated with green soap or silicone before engraving. A long curing time — twenty-four hours or more — may be required. If difficulty is experienced peeling the silicone from the mold, the scratchboard can be dissolved in hot potassium hydroxide solution. Kneaded rubber is much easier to use. Results with permanent stamps have not been sufficiently better to make the extra trouble and delay seem worth while.

Mr. Richard Fall, of Bio Metal Associates, has given encouragement and valuable suggestions, and has kindly assisted in procuring materials used in developing the technique. I am gratefully to R. B. Cowles for his comments on the manuscript.